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SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER DUNN, DANIELLE N	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/588,935

**Applicant(s)**

IWASAKI, OSAMU

**Examiner**

Danielle Dunn

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/09/2006</u>   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

3. The information disclosure statement (IDS) submitted on 8/09/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1, 3, 5-13, 15-18, and 21-24** are rejected under 35 U.S.C. 102(b) as being anticipated by Furukawa et al. (JP 05-249320).

With respect to **claim 1**, Furukawa et al. teach a transparent light guide plate comprising a rectangular light exit surface (optical diffusion layer 3; Fig. 5) and a thick portion positioned at substantially a central portion of said rectangular light exit surface

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in parallel with opposing side of said thick portion (the central section of Fig. 5 is a thick portion). Furukawa et al. also teach the thin edge portions being formed in parallel on both sides of said thick portion (looking at the two sides of Fig. 5 one can see both the parallel sides have thin edge portions). Furukawa et al. also teach a parallel groove (dead air space for light sources 8; Fig. 5) which accommodates a bar-like light source (light source 2) and is formed at substantially a center of said thick portion in parallel with two opposing sides (Fig. 5). Furukawa et al teach inclined rear portions (the inclined layer section of a tabular lightguide 5S shown in Fig. 5) which are symmetrical with respect to a plane including a central axis of said bar-like light source and perpendicular to said rectangular light exit surface, and whose thickness is reduced from said thick portion toward said thin edge portions in a direction perpendicular to said opposing two sides to thereby form inclined rear surfaces on both sides of parallel groove (Fig. 5). Furukawa et al. teach an end portion of said parallel groove being narrowed toward said rectangular light exit surface symmetrically with respect to a center line of said parallel groove perpendicular to said rectangular light exit surface in a sectional shape of said parallel groove in said direction perpendicular to said rectangular light exit surface, in accordance with a ratio of a peak value of illuminance or luminance of emitted light from said bar-like light source accommodated in said parallel groove at a first portion of said rectangular light exit surface corresponding to said parallel groove to an average value of said illuminance or luminance of said emitted light at second portions corresponding to said inclined rear portions (the end

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portions of the dead air space for light sources 8 is narrowed toward the optical diffusion layer 3; Fig. 5).

With respect to **claim 3**, Furukawa et al. teach a transparent light guide plate, comprising a rectangular light exit surface (optical diffusion layer 3; Figs. 1-5) and a thick portion positioned at substantially a central portion of said rectangular light exit surface in parallel with opposing two sides of said rectangular light exit surface (the central section of Figs. 1-5 is a thick portion). Furukawa et al. also teach the thin edge portions being formed in parallel on both sides of said thick portion (looking at the two sides of Figs. 1-5 one can see both the parallel sides have thin edge portions).

Furukawa et al. also teach a parallel groove (dead air space for light sources 8; Figs. 1-5) which accommodates a bar-like light source (light source 2) and is formed at substantially a center of said thick portion in parallel with said opposing two sides (Figs. 1-5) and inclined rear portions (the inclined layer section of a tabular lightguide 5S clearly seen in Fig. 5) which are symmetrical with respect to a plane including a central axis of said bar-like light source and perpendicular to said rectangular light exit surface. Furukawa et al teach the inclined rear portions thickness being reduced from said thick portion toward said thin edge portions in a direction perpendicular to said opposing two sides to thereby form inclined rear surfaces on both sides of said parallel groove, wherein an end portion of said parallel groove is narrowed toward said rectangular light exit surface symmetrically with respect to a center line of said parallel groove perpendicular to said rectangular light exit surface in a sectional shape of said parallel

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groove in said direction perpendicular to said rectangular light exit surface (Fig. 5), in such a manner that a peak value of illuminance or luminance of emitted light from said bar-like light source accommodated in said parallel groove at a first portion of said rectangular light exit surface corresponding to said parallel groove is three or less times as large as an average value of said illuminance or luminance of said emitted light at a second portion corresponding to said inclined rear portions (the end portions of the dead air space for light sources 8 is narrowed toward the optical diffusion layer 3; Fig. 5).

With respect to **claim 5**, Furukawa et al teach the end portion forming an angle of 90 degrees or less, with the angle being obtained by combining two angles between both sides of said sectional shape of said parallel groove and a perpendicular line extending from a center of said bar-like light source toward said rectangular light exit surface (shown in Fig. 5).

With respect to **claim 6**, Furukawa et al. teach the end portion forms an angle of 60 degrees or less, said angle being obtained by combining two angles between both sides of said sectional shape of said parallel groove and a perpendicular line extending from a center of said bar-like light source toward said rectangular light exit surface (Figs. 5).

With respect to **claim 7**, Furukawa et al. teach the sectional shape of the end portion of the parallel groove being defined by part of two straight or curved lines symmetrical with respect to said center line of said parallel groove, which cross each other at an intersection as a peak (Figs. 3 and 5).

With respect to **claim 8**, Furukawa et al. teach two curved lines defining the sectional shape of the end portion of the parallel groove being convex or concave with respect to said center line of said parallel groove (Fig. 3 and 4).

With respect to **claim 9**, Furukawa et al. teach two curved lines defining the shape of the end portion of the parallel groove being convex or concave with respect to said center line of said parallel groove (Fig. 3 and 4). Regarding the parallel groove being approximated by a tenth-order mathematical function, the applicant is advised that, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, (Fed. Cir. 1985). In this case, the cited limitations failed to distinguish the claimed structure from the patented lightguide of Furukawa et al. See MPEP § 2113.

With respect to **claim 10**, Furukawa et al. teach two curved lines defining the sectional shape of the end portion of the parallel groove or the sectional shape of said parallel groove comprising part of circular, elliptical, parabolic, or hyperbolic lines, which are convex or concave with respect to said center line of said parallel groove (Fig. 3 and 4).

With respect to **claim 11**, Furukawa et al. teach the sectional shape of at least said end portion of said parallel groove or the sectional shape of said parallel groove being triangular (shown in Figs. 1, 2 and 5).

With respect to **claim 12**, Furukawa et al. teach the sectional shape at a top of said end portion of the parallel groove being defined by said two straight or curved lines symmetrical with respect to said center line cross each other and a straight or curved line symmetrical with respect to said center line which is connected to said two straight or curved lines before said two straight or curved lines cross each other (Figs. 3 and 5).

With respect to **claim 13**, Furukawa et al. teach the sectional shape at the top of said end portion of said parallel groove having a portion parallel with said rectangular light exit surface where said intersection as the peak is chamfered (the bottom portion of the sectional shape at the top of the end portion of the parallel groove is parallel with the



optical diffusion layer 3; Fig. 1,2, and 5).

With respect to **claim 15**, Furukawa et al. teach the sectional shape at the top of the end portion of the parallel groove being a curved shape symmetrical with respect to the center line and convex or concave with respect to the rectangular light exit surface (Figs. 3 and 4).

With respect to **claim 16**, Furukawa et al. teach the sectional shape at the top of the end portion of the parallel groove being a circular, elliptical, parabolic, or hyperbolic shape obtained by rounding said intersection as the peak symmetrically with respect to said center line (Figs. 3 and 4).

With respect to **claim 17**, Furukawa et al. teach the sectional shape of the end portion of the parallel groove being defined by part of an elliptical or hyperbolic line (Fig. 3).

With respect to **claim 18**, regarding the groove being sanded, the applicant is advised that, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re*

*Thorpe*, 227 USPQ 964, (Fed. Cir. 1985). In this case, the cited limitations failed to distinguish the claimed structure from the patented lightguide of Furukawa et al. See MPEP § 2113.

With respect to **claim 21**, Furukawa et al. teach a planar lighting device comprising a light guide plate with a rectangular light exit surface (optical diffusion layer 3; Figs. 1-5), a thick portion positioned at substantially a central portion of said rectangular light exit surface in parallel with opposing two sides of said rectangular light exit surface (the central section of Figs. 1-5 is a thick portion), and thin edge portions formed in parallel on both sides of said thick portion (looking at the two sides of Figs. 1-5 one can see both the parallel sides have thin edge portions). Furukawa et al. also teach a parallel groove (dead air space for light sources 8; Figs. 1-5) which accommodates a bar-like light source (light source 2) and is formed at substantially a center of said thick portion in parallel with said opposing two sides (Figs. 1-5) with inclined rear portions (the inclined layer section of a tabular lightguide 5S clearly seen in Fig. 5) which are symmetrical with respect to a plane including a central axis of said bar-like light source and perpendicular to said rectangular light exit surface. Furukawa et al. teach the inclined rear portions thickness being reduced from the thick portion toward the thin edge portions in a direction perpendicular to said opposing two sides to thereby forming inclined rear surfaces on both sides of said parallel groove (Fig. 5). Furukawa et al. teach the end portion of the parallel groove being narrowed toward the rectangular light exit surface symmetrically with respect to a center line of the parallel groove

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perpendicular to the rectangular light exit surface in a sectional shape of the parallel groove in the direction perpendicular to the rectangular light exit surface, in accordance with a ratio of a peak value of illuminance or luminance of emitted light from said bar-like light source accommodated in said parallel groove at a first portion of said rectangular light exit surface corresponding to said parallel groove to an average value of said illuminance or luminance of said emitted light at second portions corresponding to said inclined rear portions (the end portions of the dead air space for light sources 8 is narrowed toward the optical diffusion layer 3; Figs. 5). Furukawa et al. also teach a bar-like light source (light source 2) accommodated in the parallel groove of the light guide plate, a reflector (light reflex object 2a) provided behind said bar-like light source to cover said parallel groove, a reflective sheet provided on said inclined rear surfaces of said inclined rear portions on both sides of said thick portion of said light guide plate (low refractive-index layer or high reflection factor layer 4), and a diffusion sheet arranged on said rectangular light exit surface of said light guide plate (optical diffusion layer 3).

6. **Claims 20 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Kunishige (JP 11-149073).

With respect to **claim 20**; Kunishige teaches light guide plate formed from two or more light guide plates each comprising a rectangular light exit surface (display panel 1), a thick portion positioned at substantially a central portion of said rectangular light exit surface in parallel with opposing two sides of said rectangular light exit surface (Fig.

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2), and thin edge portions formed in parallel on both sides of said thick portion (light guide plates 4, 5 have thin edge portions; Fig. 2). Kunishige also teaches a parallel groove which accommodates a bar-like light source and is formed at substantially a center of said thick portion in parallel with said opposing two sides (shown in Fig. 2) and inclined rear portions which are symmetrical with respect to a plane including a central axis of said bar-like light source and perpendicular to said rectangular light exit surface (inclined rear portions are shown in Fig. 2). Kunishige teaches the inclined rear portions thickness being reduced from the thick portion toward the thin edge portions in a direction perpendicular to said opposing two sides to thereby form inclined rear surfaces on both sides of said parallel groove (the thickness of the light guide plates 4, 5 are reduced from the thick portion toward the thin edge portions; Fig. 2), wherein an end portion of said parallel groove is narrowed toward said rectangular light exit surface symmetrically with respect to a center line of said parallel groove perpendicular to said rectangular light exit surface in a sectional shape of said parallel groove in said direction perpendicular to said rectangular light exit surface (Fig. 2), in accordance with a ratio of a peak value of illuminance or luminance of emitted light from said bar-like light source accommodated in said parallel groove at a first portion of said rectangular light exit surface corresponding to said parallel groove to an average value of said illuminance or luminance of said emitted light at second portions corresponding to said inclined rear portions, and wherein said two or more light guide plates are connected with each other at said thin edge portions thereof.

With respect to **claim 24**, Kunishige teaches a liquid crystal display device comprising a backlight unit (Fig. 6) including a planar lighting device. Kunishige teaches a liquid crystal display panel arranged on a light exit surface side of said backlight unit (display panel 1), and a drive unit (energization member 8) driving said backlight unit and the liquid crystal display panel. Kunishige teaches the planar lighting device comprising a light guide plate (light guide plate 4, 5) with a rectangular light exit surface (Fig. 2), a thick portion positioned at substantially a central portion of said rectangular light exit surface in parallel with opposing two sides of said rectangular light exit surface (Fig. 2), and thin edge portions formed in parallel on both sides of said thick portion (light guide plates 4, 5 have thin edge portions; Fig. 2). Kunishige teaches a parallel groove which accommodates a bar-like light source and is formed at substantially a center of said thick portion in parallel with said opposing two sides (shown in Fig. 2) and inclined rear portions which are symmetrical with respect to a plane including a central axis of said bar-like light source and perpendicular to said rectangular light exit surface (Fig. 2). Kunishige teaches the inclined rear portions thickness being reduced from the thick portion toward the thin edge portions in a direction perpendicular to said opposing two sides to thereby form inclined rear surfaces on both sides of said parallel groove (the thickness of the light guide plates 4, 5 are reduced from the thick portion toward the thin edge portions; Fig. 2). Kunishige teaches an end portion of the parallel groove being narrowed toward the rectangular light exit surface symmetrically with respect to a center line of the parallel groove perpendicular to the rectangular light exit surface in a sectional shape of said parallel groove in a direction perpendicular to the rectangular

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light exit surface (Fig. 2), in accordance with a ratio of a peak value of illuminance or luminance of emitted light from said bar-like light source accommodated in said parallel groove at a first portion of said rectangular light exit surface corresponding to said parallel groove to an average value of said illuminance or luminance of said emitted light at second portions corresponding to said inclined rear portions. Kunishige teaches a bar-like light source (light source 3) accommodated in the parallel groove of the light guide plate, a reflector provided behind said bar-like light source to cover said parallel groove (reflecting plate 7, Fig. 2); a reflective sheet provided on said inclined rear surfaces of said inclined rear portions on both sides of said thick portion of said light guide plate (reflecting plate 7); and a diffusion sheet arranged on said rectangular light exit surface of said light guide plate (diffusion member 6).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 2 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (JP 05-249320) as applied to claim 1 above, and further in view of Kunishige (JP 11-149073).

With respect to **claim 2**, Furukawa et al. teach all the limitations as disclosed above. Furukawa et al. do not explicitly teach having the end portion of said parallel groove being symmetrically narrowed such that a peak value of relative illuminance or relative luminance at said first portion of said rectangular light exit surface is three or less times as large as an average value of said relative illuminance or relative luminance at said second portions of said rectangular light exit surface. However, Kunishige teaches equalizing the outgoing radiation luminance distribution of a light guide plate (Para 29). Therefore, it would have been obvious to have the end portion of said parallel groove is symmetrically narrowed such that a peak value of relative illuminance or relative luminance at said first portion of said rectangular light exit surface is three or less times as large as an average value of said relative illuminance or relative luminance at said second portions of said rectangular light exit surface because this would allow one to equalize the luminance of the backlight unit as needed. Since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only ordinary skill in the art. *In re Aller*, 105 USPQ 233.

With respect to **claim 4**, Furukawa et al. teach all the limitations as disclosed above. Furukawa et al. do not explicitly teach having the peak of relative illuminance or relative luminance at said first portion of said rectangular light exit surface is twice or less as large as said average value of said relative illuminance or relative luminance at said second portion of said rectangular light exit surface. However, Kunishige teaches equalizing the outgoing radiation luminance distribution of a light guide plate (Para 29). Therefore, it would have been obvious to have the peak of relative illuminance or relative luminance at said first portion of said rectangular light exit surface is twice or less as large as said average value of said relative illuminance or relative luminance at said second portion of said rectangular light exit surface because this would allow one to equalize the luminance of the backlight unit as needed. Since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only ordinary skill in the art. *In re Aller*, 105 USPQ 233.

10. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (JP 05-249320) as applied to claim 1 above

With respect to **claim 14**; It would have been obvious to one skilled in the art at the time of the invention to modify the dead air space for light sources 8 of Furukawa et al. to have a trapezoidal shape symmetrical with respect to said center line, since it has been held by the courts that a change in shape or configuration, without any criticality, is nothing more than one of numerous shapes that one of ordinary skill in the art will find



obvious to provide based on the suitability for the intended final application. See *In re Dailey*, 149 USPQ 47 (CCPA 1976). It appears that the disclosed device would perform equally well shaped as disclosed by Furukawa et al.

11. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (JP 05-249320) as applied to claim 1 above, and further in view of Ide et al. (US 2003/0120210).

With respect to **claim 19**, Furukawa et al. teach all the limitations as disclosed above. However, Furukawa et al. do not explicitly disclose a halftone dot pattern being formed in a portion of the rectangular light exit surface corresponding to the top of the end portion of the parallel groove. However, Ide et al. teach a random dot pattern 106 being formed in a portion of a light guide plate 108 shown in Fig. 2 (Para 16; lines 1-15). It would have been obvious to one skilled in the art at the time of the invention to modify the backlight unit of Furukawa et al. to include the random dot pattern of Ide et al. because it generates a reduction of moiré.

12. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (JP 05-249320) as applied to claim 21 above, and further in view of Yokoyama et al. (US 5,402,324).

With respect to **claim 22**, Furukawa et al. teaches all the limitations as described above. Furukawa et al. do not explicitly teach the planar lighting device further

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comprising a prism sheet arranged between said rectangular light exit surface of said light guide plate and said diffusion sheet. However Yokoyama et al. teaches a prism sheet 7 being arranged between a rectangular light exit surface (liquid crystal panel 5) of said and a diffusing member 3. Furukawa et al. and Yokoyama et al. are analogous art because they are from the same field of endeavor, backlights. It would have been obvious to one skilled in the art at the time of the invention to modify the backlight of Furukawa to include the prism sheet of Yokoyama et al. because satisfactory brightness can be maintained.

13. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (JP 05-249320) as applied to claim 21 above, and further in view of Kunishige (JP 11-149073).

With respect to **claims 23**, Furukawa et al. teach all the limitations as disclosed above. Furukawa et al. do not explicitly teach having a ratio of a peak value of relative illuminance or luminance at a first portion of said rectangular light exit surface of said light guide plate to an average value of relative illuminance or luminance at a second portion of said rectangular light exit surface is determined in accordance with a permissible gap between said rectangular light exit surface of said light guide plate and said diffusion sheet, or a permissible thickness of said planar lighting device. However, Kunishige teaches equalizing the outgoing radiation luminance distribution of a light guide plate (Para 29). Therefore, it would have been obvious to one skilled in the art at the time of the invention to have a ratio of a peak value of relative illuminance or

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luminance at a first portion of said rectangular light exit surface of said light guide plate to an average value of relative illuminance or luminance at a second portion of said rectangular light exit surface is determined in accordance with a permissible gap between said rectangular light exit surface of said light guide plate and said diffusion sheet, or a permissible thickness of said planar lighting device because this would allow one to equalize the luminance of the backlight unit as needed. Since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only ordinary skill in the art. *In re Aller*, 105 USPQ 233.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP 09-265074 A teaches a driving device for a backlight.

JP 09-304623 A teaches a backlight device.

US 5,034,864 teach a planar light source device.

US 6,923,554 teach a backlight module.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Dunn whose telephone number is 571-270-3039. The examiner can normally be reached on M-F 7:30-5:00 with alternate Friday's off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DND  
9/22/07



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800